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ARMY ELECTRONICS RESEARCH AND DEVELOPMENT COMMAND WS--ETC F/G 4/2
19305AT GSRS, MISSILES NUMBER 1042, 1039, ROUNDS NUMBER V-44, V--ETC(U)
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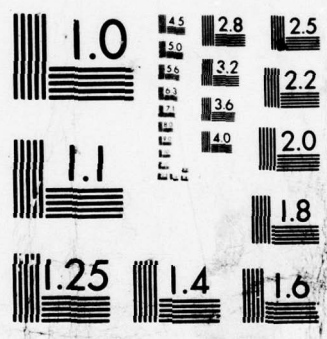
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June 1979
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METEOROLOGICAL DATA REPORT

19305AT GSRS
Missiles No. 1042, 1039
Rounds No. V-44, V-45
26 June 1979

by

White Sands Meteorological Team

✓
ATMOSPHERIC SCIENCES LABORATORY
WHITE SANDS MISSILE RANGE, NEW MEXICO

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UNITED STATES ARMY ELECTRONICS COMMAND

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17. DISTRIBUTION STATEMENT (of the abstract entered in Block 20, if different from Report) (6) 19305AT GSRS, Missiles Number 1042, 1039, Rounds Number V-44, V-45.		
18. SUPPLEMENTARY NOTES (9) Meteorological data rept.		
19. KEY WORDS (Continue on reverse side if necessary and identify by block number) 1. Ballistics 2. Meteorology 3. Wind		
20. ABSTRACT (Continue on reverse side if necessary and identify by block number) Meteorological data gathered for the launching of 19305AT GSRS, Missiles No. 1042 and 1039, Rounds No. V-44 and V-45, are presented in tabular form.		

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INTRODUCTION

19305AT GSRS, Missile Numbers 1042 and 1039, Round Numbers V-44 and V-45, were launched from LC-33, White Sands Missile Range (WSMR), New Mexico, at 1045 and 1045:03 MDT, 26 June 1979. The scheduled launch times were 1045 and 1045:02 MDT.

DISCUSSION

Meteorological data were recorded and reduced by the White Sands Meteorological Team, Atmospheric Sciences Laboratory (ASL), White Sands Missile Range, New Mexico. The data were obtained by the following methods:

1. Observations

a. Surface

(1) Standard surface observations to include pressure, temperature ($^{\circ}\text{C}$), relative humidity, dew point ($^{\circ}\text{C}$), density (gm/m^3), wind direction and speed, and cloud cover were made at the LC-33 Met Site at T-0 minutes.

(2) Anemometer data were provided from existing pole-mounted and tower-mounted anemometers at LC-33. Monitor of wind speed and direction from one anemometer was also provided in the launch control room.

b. Upper Air

(1) Low level wind data were obtained from RAPTS T-9 pibal observation at:

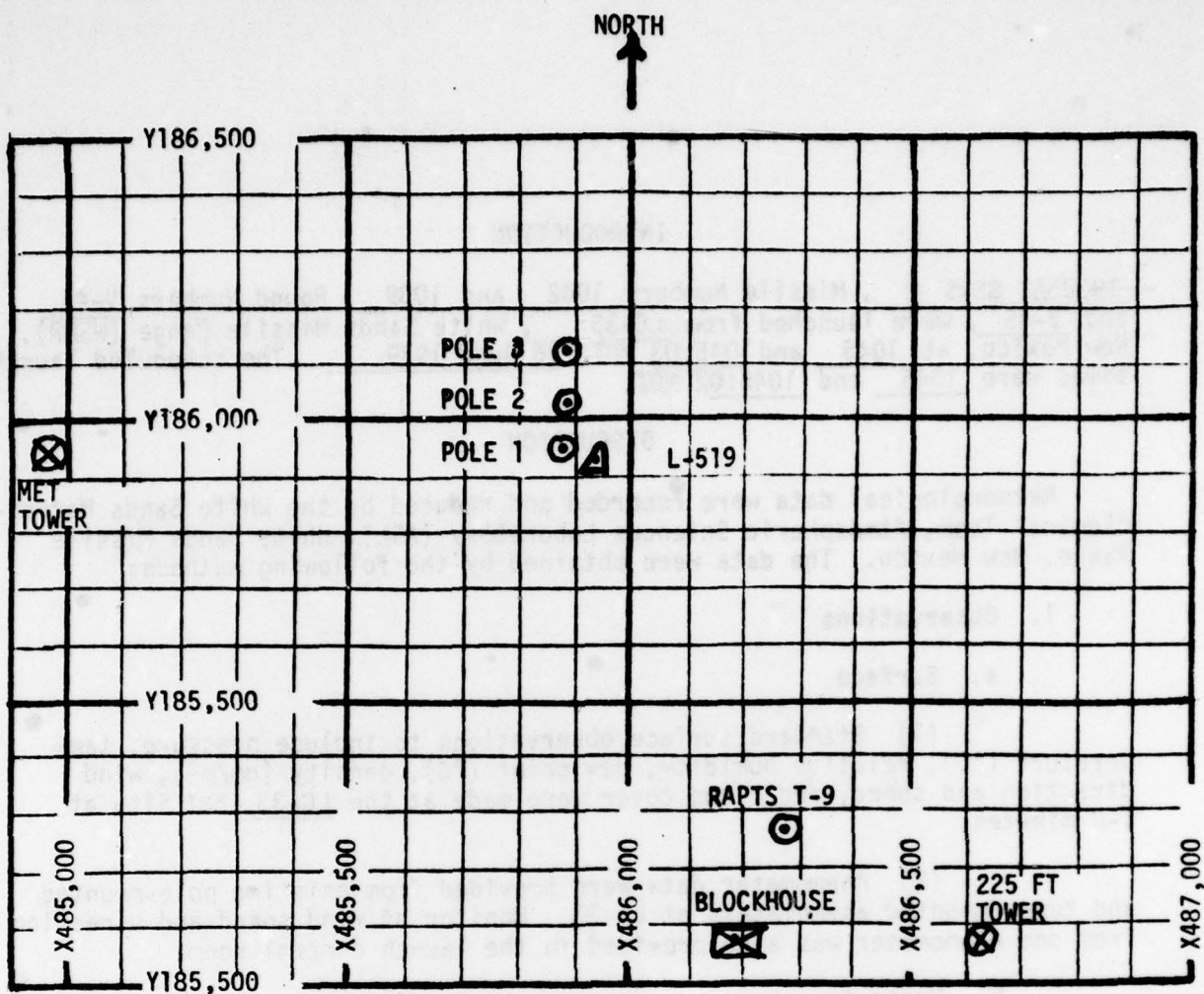
SITE AND ALTITUDE

LC-33 1080 meters

(2) Air structure data (rawinsonde) were collected at the following Met Sites. Data were collected from surface to 86,000 feet in 500-foot increments.

SITE AND TIME

SMR 0915 MST



1. MET TOWER - 4 Bendix Model T-120 Anemometers at 12 ft, 62 ft, 102 ft and 202 ft with E/A recorders.
2. POLE ANEMOMETER - Bendix Model T-120 with E/A recorders.
 - (a) Pole #1 - 38.7 ft
 - (b) Pole #2 - 53.0 ft
 - (c) Pole #3 - 83.6 ft
3. 225 FT WIND TOWER - 5 Bendix Model T-120 Anemometers at 35 ft, 88 ft, 128 ft, 168 ft and 200 ft with 5 X-Y visual indicators in Blockhouse.
4. RAPTS T-9 - Radar Automatic Pilot-Balloon Tracking System T-9 Radar

TABLE 1. SURFACE OBSERVATIONS TAKEN AT 1045 MDT,
26 JUNE 1979 AT LC-33, 19305AT GSRS,
MISSILES NO. 1042 AND 1039, ROUNDS NO.
V-44 AND V-45

ELEVATION	3977.30	FT/MSL
PRESSURE	886.7	MBS
TEMPERATURE	29.3	°C
RELATIVE HUMIDITY	34	%
DEW POINT	11.7	°C
DENSITY	1013	GM/M ³
WIND SPEED	Calm	MPH
WIND DIRECTION	Calm	DEGREES
CLOUD COVER	Clear	

TABLE 2. LC-33 FIXED POLE ANEMOMETER-MEASURED WINDS

POLE #1			POLE #2			POLE #3		
T-TIME SEC	DIR DEG	SPEED MPH	T-TIME SEC	DIR DEG	SPEED MPH	T-TIME SEC	DIR DEG	SPEED MPH
-30	000	.00	-30	169	05	-30	164	04
-20	000	00	-20	164	05	-20	147	04
-10	000	00	-10	171	04	-10	143	03
0.0	000	00	0.0	158	03	0.0	147	01
+10	000	00	+10	084	04	+10	179	06

Type 19305AT GSRS, Missiles No. 1042, 1039, Rounds No. V-44, V-45, launched from LC-33 on 26 June 1979 at 1045, 1045:03 MDT.

POLE #1 = X485,874.29 Y185,958.90 H4018.74 38.7 ft. AGL

POLE #2 = X485,874.93 Y186,012.00 H4033.57 53.0 ft. AGL

POLE #3 = X485,877.29 Y186,116.06 H4063.92 83.6 ft. AGL

NOTE: Wind directions are referenced to the firing azimuth _____ or true north true north.

TABLE 3. LC-33 METEOROLOGICAL TOWER ANEMOMETER-MEASURED WINDS (202 FT. TOWER)

LEVEL #1 12 ft.			LEVEL #2 62 ft.		
T-TIME SEC	DIR DEG	SPEED MPH	T-TIME SEC	DIR DEG	SPEED MPH
-30	131	05	-30	139	01
-20	133	06	-20	134	03
-10	127	05	-10	131	04
0.0	103	06	0.0	117	02
+10	147	08	+10	117	02
LEVEL #3 102 ft.			LEVEL #4 202 ft.		
T-TIME SEC	DIR DEG	SPEED MPH	T-TIME SEC	DIR DEG	SPEED MPH
-30	154	04	-30	133	05
-20	149	04	-20	133	04
-10	149	05	-10	135	03
0.0	150	08	0.0	146	03
+10	156	07	+10	152	03

WTSM Coordinates: X484,982.64 Y185,957.73 H3983.00 (base)

Type 19305AT GSRs, Missiles No. 1042, 1039, Rounds No. V-44, V-45, launched from LC-33 on 26 June 1979 at 1045, 1045:03 MDT.

NOTE: Wind directions are referenced to the firing azimuth _____ or true north true north.

TABLE 4. PILOT-BALLOON-MEASURED WIND DATA (30-METER INCREMENTS)

HEIGHT METERS AGL	DIRECTION DEGREES	SPEED MPH
SFC	Calm	00
30	040	0.5
60	079	0.5
90	119	0.5
120	158	0.5
150	158	2.5
180	157	4.5
210	156	6.5
240	155	8.5
270	154	8.5
300	153	8.0
330	152	7.5
360	150	7.0

HEIGHT METERS AGL	DIRECTION DEGREES	SPEED MPH
390	150	6.5
420	149	6.0
450	149	5.5
480	148	5.0
510	148	5.5
540	147	5.5
570	147	6.0
600	146	6.0
630	142	6.5
660	137	6.5
690	132	6.5
720	127	6.5
750	136	5.5

Release Point Coordinates (WSTM): X486,037.24 Y486,037.24 H3977.30

Released from LC-33 on 26 June 1979 at 1045 MDT.

Type 19305AT GSRS, Missiles No. 1042, 1039, Rounds No. V-44, V-45, launched from LC-33 on 26 June 1979 at 1045, 1045:03 MDT.

NOTE: Wind directions are referenced to the firing azimuth _____
or true north true north.

HEIGHT METERS AGL	DIRECTION DEGREES	SPEED MPH
780	144	4.5
810	153	3.5
840	161	2.0
870	157	3.0
900	153	4.0
930	149	5.0
960	145	6.0
990	146	6.0
1020	147	6.0
1050	148	6.0
1080	149	5.5
1110		
1140		
1170		
1200		
1230		
1260		
1290		
1320		
1350		
1380		
1410		

HEIGHT METERS AGL	DIRECTION DEGREES	SPEED MPH
1440		
1470		
1500		
1530		
1560		
1590		
1620		
1650		
1680		
1710		
1740		
1770		
1800		
1830		
1860		
1890		
1920		
1950		
1980		
2010		
2040		
2070		

GEODETIC COORDINATES
32.48034 LAT DEG
106.42307 LON DEG

SIGNIFICANT LEVEL DATA
1770060208
S M R

STATION ALTITUDE 3997.30 FEET MSL
26 JUNE 79 0915 HRS MST
ASCENSION NO. 208

PRESSURE GEOMETRIC ALTITUDE MILLIBARS MSL FEET	TEMPERATURE		REL. HUM. PERCENT
	AIR DEGREES	DEWPOINT CENTIGRADE	
885.8	30.4	12.3	33.0
872.4	26.4	10.5	37.0
850.0	23.8	9.8	41.0
774.4	17.0	7.1	52.0
743.2	15.5	2.0	40.0
700.0	12.6	-6	40.0
674.4	10.4	-6.8	29.0
576.0	.0	-18.1	24.0
555.2	-2.7	-13.0	45.0
543.0	-4.0	-16.5	37.0
500.0	-8.3	-23.5	28.0
477.9	-11.2	-32.6	15.0
431.0	-16.5	-36.3	16.0
424.2	-17.2	-31.3	28.0
417.4	-17.2	-37.6	15.0
400.0	-18.8	-38.9	15.0
376.1	-22.2	-39.0	20.0
369.2	-24.5	-32.7	46.0
319.4	-31.3	-45.9	22.0
300.0	-34.5	-50.4	18.0
262.2	-42.2		
250.0	-43.5		
200.0	-53.4		
167.8	-58.7		
150.0	-62.9		
131.4	-66.9		
127.8	-66.3		
104.8	-70.4		
100.0	-72.3		
92.4	-76.0		
74.2	-62.7		
70.0	-62.1		
56.8	-61.0		
50.0	-56.6		
37.0	-54.8		
30.0	-49.5		
25.8	-48.5		
22.4	-43.5		

GEODETIC COORDINATES
32.48034 LAT DEG
106.42307 LON DEG

UPPER AIR DATA
1770060208
S M R

STATION ALTITUDE 3997.30 FEET MSL
25 JUNE 79 0915 HRS MST
ASCENSION NO. 208

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES(TN)	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
3997.3	885.8	30.4	33.0	1010.4	680.8	210.0	6.0	.000284
4000.0	885.7	30.4	33.0	1010.3	680.8	209.9	6.0	1.000284
4500.0	870.6	26.2	37.3	1007.6	675.9	198.1	5.8	1.000278
5000.0	855.7	24.5	40.0	996.2	673.9	186.0	5.9	1.000275
5500.0	840.8	23.0	42.3	983.8	672.2	174.5	6.2	1.000271
6000.0	826.2	21.7	44.4	970.9	670.8	166.8	6.5	1.000267
7000.0	797.6	19.2	46.4	958.2	669.3	174.7	5.5	1.000263
7500.0	783.6	17.9	48.5	945.7	667.8	186.4	3.9	1.000259
8000.0	769.9	16.8	50.6	933.4	666.3	231.2	1.7	1.000254
8500.0	756.2	16.1	50.3	920.7	664.9	327.4	2.1	1.000249
9000.0	742.8	15.5	45.1	906.9	664.0	2.0	4.5	1.000240
9500.0	729.6	14.6	40.0	893.4	663.0	19.2	6.9	1.000231
10000.0	716.5	13.7	40.0	880.2	662.0	31.5	9.4	1.000227
10500.0	703.7	12.9	40.0	867.2	660.9	33.3	11.7	1.000222
11000.0	691.1	11.8	40.0	854.4	659.9	32.6	13.8	1.000218
11500.0	678.6	10.8	36.2	842.4	658.6	28.9	13.8	1.000211
12000.0	666.2	9.6	30.8	830.8	657.2	24.1	13.4	1.000204
12500.0	653.9	8.4	28.6	819.2	655.7	23.0	13.3	1.000199
13000.0	641.8	7.1	28.0	807.7	654.2	22.5	13.3	1.000195
13500.0	630.0	5.9	27.4	796.4	652.8	23.4	14.0	1.000191
14000.0	618.3	4.7	26.8	785.3	651.3	24.9	14.6	1.000187
14500.0	606.9	3.4	26.2	774.3	649.8	27.8	14.8	1.000183
15000.0	595.7	2.2	25.7	763.4	648.3	31.3	15.5	1.000180
15500.0	584.7	1.0	25.1	752.8	646.8	35.2	16.7	1.000177
16000.0	573.9	-0.3	24.5	742.3	645.4	30.9	18.0	1.000173
16500.0	563.0	-1.7	26.1	731.9	643.9	37.3	19.3	1.000171
17000.0	552.4	-3.0	37.0	721.5	642.3	38.2	20.8	1.000171
17500.0	541.9	-4.1	43.2	711.3	640.8	39.4	22.5	1.000169
18000.0	531.4	-5.1	36.8	700.8	639.4	43.3	23.8	1.000165
18500.0	521.2	-6.1	34.7	690.0	638.1	48.2	24.9	1.000161
19000.0	511.2	-7.1	32.5	679.4	636.9	50.8	24.3	1.000158
19500.0	501.3	-8.2	30.4	668.9	635.6	53.1	23.2	1.000155
20000.0	491.6	-9.4	28.3	658.6	634.4	52.9	21.5	1.000152
20500.0	482.0	-10.7	23.1	648.9	632.9	53.3	20.1	1.000148
21000.0	472.5	-11.8	17.5	639.4	631.3	55.1	19.1	1.000145
21500.0	463.2	-12.8	15.1	629.6	629.9	57.0	18.0	1.000142
22000.0	454.0	-13.8	15.3	619.6	628.7	59.0	16.9	1.000140
22500.0	445.0	-14.9	15.5	609.7	627.4	61.4	15.7	1.000138
23000.0	436.2	-15.9	15.7	600.0	626.2	64.2	14.5	1.000135
			15.9	590.5	624.9	66.4	13.2	1.000133

STATION ALTITUDE 3997.30 FEET MSL
 26 JUNE 79 0915 HRS MST
 ASCENSION NO. 208

UPPER AIR DATA
 1770060208
 S M R

GEODETTIC COORDINATES
 32.48034 LAT DEG
 106.42307 LON DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES DEWPOINT CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES(TN)	SPEED KNOTS	INDEX OF REFRACTION
23500.0	427.5	-16.9	22.2	580.9	623.8	69.0	11.9	1.000131
24000.0	418.9	-17.2	17.9	570.0	623.3	71.6	11.6	1.000129
24500.0	410.5	-17.8	15.0	560.0	622.6	75.0	11.4	1.000126
25000.0	402.2	-18.6	15.0	550.3	621.6	82.1	11.3	1.000124
25500.0	394.1	-19.6	16.2	541.4	620.4	88.2	10.9	1.000122
26000.0	386.1	-20.8	17.9	532.8	619.0	91.1	9.1	1.000120
26500.0	378.2	-21.9	19.5	524.3	617.6	94.2	7.3	1.000118
27000.0	370.5	-23.0	29.1	515.8	616.2	94.7	5.5	1.000117
27500.0	362.9	-24.1	41.6	507.4	614.9	92.9	3.7	1.000115
28000.0	355.3	-25.3	43.3	499.2	613.5	72.3	2.2	1.000113
28500.0	347.9	-26.5	39.1	491.2	612.0	20.0	2.1	1.000111
29000.0	340.6	-27.7	34.8	483.2	610.5	1.6	5.0	1.000109
29500.0	333.5	-28.9	30.6	475.5	609.0	2.6	7.7	1.000107
30000.0	326.5	-30.1	26.4	467.8	607.5	17.1	10.0	1.000105
30500.0	319.7	-31.2	22.2	460.3	606.0	25.8	11.9	1.000103
31000.0	312.9	-32.4	20.7	452.6	604.6	32.7	12.1	1.000101
31500.0	306.2	-33.5	19.3	445.0	603.2	38.2	11.6	1.000100
32000.0	299.6	-34.6	17.8**	437.5	601.8	42.0	9.4	1.000098
32500.0	293.1	-35.8	14.9**	430.2	600.2	50.0	7.2	1.000096
33000.0	286.7	-37.1	11.9**	423.1	598.6	70.7	5.2	1.000094
33500.0	280.4	-38.4	9.0**	416.1	597.0	102.6	4.4	1.000093
34000.0	274.3	-39.6	6.0**	409.2	595.4	132.9	4.5	1.000091
34500.0	268.3	-40.9	3.1**	402.4	593.7	155.7	5.4	1.000090
35000.0	262.5	-42.1	.1**	395.8	592.1	173.6	5.6	1.000088
35500.0	256.6	-42.8		388.1	591.5	187.7	5.9	1.000086
36000.0	250.9	-43.4		380.5	590.5	194.4	4.6	1.000085
36500.0	245.2	-44.4		373.4	589.3	209.3	3.5	1.000083
37000.0	239.6	-45.4		366.5	588.0	247.6	3.5	1.000082
37500.0	234.2	-46.4		359.8	586.6	268.6	4.8	1.000080
38000.0	228.8	-47.4		353.2	585.3	259.4	6.8	1.000079
38500.0	223.6	-48.4		346.7	584.0	254.3	8.9	1.000077
39000.0	218.5	-49.5		340.3	582.7	246.8	10.4	1.000076
39500.0	213.5	-50.5		334.1	581.3	241.4	12.1	1.000074
40000.0	208.7	-51.5		328.0	580.0	245.7	14.0	1.000073
40500.0	203.9	-52.5		322.0	578.6	249.8	15.9	1.000072
41000.0	199.2	-53.5		316.0	577.4	254.4	16.0	1.000070
41500.0	194.5	-54.2		309.6	576.4	259.6	15.7	1.000069
42000.0	190.0	-55.0		303.3	575.5	265.3	13.5	1.000068
42500.0	185.5	-55.7		297.1	574.5	274.0	10.7	1.000066
43000.0	181.1	-56.4		291.1	573.6	267.8	7.8	1.000065

** LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

GEODETIC COORDINATES
32.48034 LAT DEG
106.42307 LON DEG

UPPER AIR DATA
1770060208
S M R

STATION ALTITUDE 3997.30 FEET MSL
26 JUNE 79 0915 HRS MST
ASCENSION NO. 208

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES(TN)	SPEED KNOTS	INDEX OF REFRACTION
43500.0	176.8	-57.1		285.2	572.6	242.4	5.6	1.000064
44000.0	172.7	-57.8		279.4	571.7	214.5	7.4	1.000062
44500.0	168.6	-58.6		273.7	570.7	202.9	10.9	1.000061
45000.0	164.6	-59.4		268.2	569.5	199.1	13.9	1.000060
45500.0	160.6	-60.3		262.9	568.3	200.6	15.2	1.000059
46000.0	156.7	-61.3		257.7	567.1	201.8	16.6	1.000057
46500.0	153.0	-62.2		252.5	565.9	196.9	16.1	1.000056
47000.0	149.3	-63.1		247.5	564.7	191.5	15.7	1.000055
47500.0	145.6	-63.8		242.3	563.7	188.3	15.5	1.000054
48000.0	142.0	-64.6		237.2	562.7	187.8	15.4	1.000053
48500.0	138.5	-65.3		232.2	561.7	187.3	15.3	1.000052
49000.0	135.1	-66.1		227.3	560.6	186.3	16.4	1.000051
49500.0	131.8	-66.8		222.5	559.6	185.4	17.6	1.000050
50000.0	128.6	-66.4		216.6	560.1	182.4	19.1	1.000048
50500.0	125.3	-66.7		211.5	559.8	179.0	20.8	1.000047
51000.0	122.2	-67.2		206.8	559.1	175.7	21.4	1.000046
51500.0	119.2	-67.7		202.1	558.3	171.4	19.8	1.000045
52000.0	116.2	-68.3		197.6	557.6	166.3	18.4	1.000044
52500.0	113.3	-68.8		193.1	556.9	167.2	15.5	1.000043
53000.0	110.5	-69.3		188.8	556.2	169.4	12.5	1.000042
53500.0	107.7	-69.8		184.6	555.5	176.4	9.7	1.000041
54000.0	105.0	-70.4		180.4	554.8	194.0	7.8	1.000040
54500.0	102.4	-71.3		176.7	553.4	218.8	7.0	1.000039
55000.0	99.8	-72.4		173.2	552.0	228.3	5.2	1.000038
55500.0	97.2	-73.6		169.7	550.3	243.7	3.3	1.000037
56000.0	94.7	-74.8		166.4	548.6	270.1	1.9	1.000036
56500.0	92.3	-75.9		163.0	547.1	317.2	.6	1.000035
57000.0	90.0	-74.4		157.7	549.2	53.5	1.4	1.000034
57500.0	87.7	-72.9		152.6	551.4	71.9	.8	1.000033
58000.0	85.5	-71.3		147.6	553.5	200.3	.7	1.000032
58500.0	83.4	-69.8		142.8	555.6	213.6	1.5	1.000031
59000.0	81.3	-68.2		138.2	557.7	202.3	1.1	1.000030
59500.0	79.3	-66.7		133.7	559.8	180.5	.8	1.000029
60000.0	77.3	-65.2		129.4	561.8	85.8	4.1	1.000028
60500.0	75.3	-63.6		125.3	563.9	79.9	8.9	1.000027
61000.0	73.5	-62.6		121.6	565.3	84.3	12.4	1.000026
61500.0	71.7	-62.3		118.5	565.6	96.1	14.0	1.000025
62000.0	70.0	-62.1		115.5	566.0	105.2	16.1	1.000024
62500.0	68.3	-62.0		112.6	566.1	111.6	15.8	1.000023
63000.0	66.6	-61.8		109.8	566.3	118.2	15.1	1.000022

GEODETIC COORDINATES
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UPPER AIR DATA
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STATION ALTITUDE 3997.30 FEET MSL
26 JUNE 79 0915 HRS MST
ASCENSION NO. 208

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES(TN)	SPEED KNOTS	INDEX OF REFRACTION
63500.0	65.0	-61.7		107.1	566.5	119.9	14.5	1.000024
64000.0	63.4	-61.6		104.5	566.7	107.0	13.8	1.000023
64500.0	61.9	-61.5		101.9	566.8	93.6	13.9	1.000023
65000.0	60.4	-61.3		99.4	567.0	85.0	15.0	1.000022
65500.0	59.0	-61.2		96.9	567.2	79.3	16.6	1.000022
66000.0	57.5	-61.1		94.5	567.3	75.2	18.1	1.000021
66500.0	56.2	-60.6		92.1	568.0	77.7	18.5	1.000021
67000.0	54.8	-59.8		89.5	569.1	80.0	18.9	1.000020
67500.0	53.5	-58.9		87.0	570.2	81.7	19.5	1.000019
68000.0	52.2	-58.1		84.6	571.3	82.2	20.1	1.000019
68500.0	51.0	-57.3		82.3	572.4	82.7	20.8	1.000018
69000.0	49.8	-56.6		80.1	573.3	83.5	21.4	1.000018
69500.0	48.6	-56.4		78.2	573.5	84.6	21.9	1.000017
70000.0	47.5	-56.3		76.3	573.7	85.6	22.5	1.000017
70500.0	46.4	-56.1		74.4	573.9	90.1	23.1	1.000017
71000.0	45.3	-56.0		72.6	574.1	95.2	23.9	1.000016
71500.0	44.2	-55.9		70.9	574.3	99.9	24.8	1.000016
72000.0	43.2	-55.7		69.2	574.5	100.0	25.1	1.000015
72500.0	42.2	-55.6		67.5	574.6	99.8	25.3	1.000015
73000.0	41.2	-55.4		65.9	574.8	99.5	25.6	1.000015
73500.0	40.2	-55.3		64.3	575.0	99.9	24.2	1.000014
74000.0	39.3	-55.2		62.7	575.2	100.3	22.6	1.000014
74500.0	38.3	-55.0		61.2	575.4	100.8	21.1	1.000014
75000.0	37.4	-54.9		59.8	575.6	101.2	21.0	1.000013
75500.0	36.6	-54.5		58.3	576.1	101.6	20.9	1.000013
76000.0	35.7	-53.9		56.8	576.8	102.0	20.9	1.000013
76500.0	34.9	-53.3		55.3	577.6	100.4	21.9	1.000012
77000.0	34.1	-52.7		53.9	578.4	98.8	22.9	1.000012
77500.0	33.3	-52.1		52.5	579.2	97.4	24.0	1.000012
78000.0	32.5	-51.6		51.2	579.9	98.8	24.0	1.000011
78500.0	31.8	-51.0		49.6	580.7	100.5	24.0	1.000011
79000.0	31.1	-50.4		48.6	581.5	102.2	24.0	1.000011
79500.0	30.3	-49.8		47.3	582.2	105.3	23.5	1.000011
80000.0	29.6	-49.4		46.2	582.7	103.7	22.9	1.000010
80500.0	29.0	-49.3		45.1	582.9	112.2	22.5	1.000010
81000.0	28.3	-49.1		44.0	583.1	112.1	22.3	1.000010
81500.0	27.7	-49.0		43.0	583.3	111.2	22.0	1.000010
82000.0	27.0	-48.8		42.0	583.5	110.3	21.8	1.000009
82500.0	26.4	-48.7		41.0	583.7	106.7	21.8	1.000009
83000.0	25.8	-48.5		40.0	583.9	102.3	22.0	1.000009

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GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEWPOINT DEGREES CENTIGRADE		REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA		INDEX OF REFRACTION
		TEMPERATURE AIR	DEWPOINT				DIRECTION DEGREES(TN)	SPEED KNOTS	
83500.0	25.2	-47.7			39.0	584.9	98.0	22.3	1.000009
84000.0	24.7	-46.9			38.0	586.0			1.000008
84500.0	24.1	-46.1			37.0	587.0			1.000008
85000.0	23.6	-45.3			36.0	588.0			1.000008
85500.0	23.0	-44.5			35.1	589.1			1.000008
86000.0	22.5	-43.7			34.2	590.1			1.000008

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MRN SIGNIFICANT LEVEL DATA
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GEODETIC COORDINATES
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GEOPOTENTIAL ALTITUDE DECA METERS	DIRECTION DEG (TN)	SPEED MPS	WIND DATA N-S MPS	E-W MPS	DEW PT DEP DEG C	TEMPERATURE AIR DEG C	PRESSURE MILLIBARS
2613.	999.**	9999.**	-9999.**	-9999.**	99	-43.5	2.240+1
2519.	102.	11.	2.	-11.	99	-48.5	2.580+1
2420.	107.	12.	3.	-11.	99	-49.5	3.000+1
2284.	101.	11.	2.	-11.	99	-54.8	3.700+1
2092.	83.	11.	-1.	-11.	99	-56.6	5.000+1
2012.	77.	9.	-2.	-9.	99	-61.0	5.680+1
1883.	105.	8.	2.	-6.	99	-62.1	7.000+1
1847.	79.	6.	-1.	-6.	99	-76.0	9.240+1
1716.	311.	0.	-0.	0.	99	-72.3	1.000+2
1670.	228.	3.	2.	2.	99		

** WIND DATA NOT COMPUTED DUE TO MISSING RAW AZIMUTH AND ELEVATION ANGLES.

STATION ALTITUDE 3997.30 FEET MSL
26 JUNE 79 0915 HRS MST
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MANDATORY LEVELS
1770060208
S M R

GEODETIC COORDINATES
32.48034 LAT DEG
106.42307 LON DEG

PRESSURE GEOPOTENTIAL		TEMPERATURE		REL. HUM. PERCENT	WIND DATA	
MILLIBARS	FEET	AIR DEGREES CENTIGRADE	DEWPOINT CENTIGRADE		DIRECTION DEGREES(TN)	SPEED KNOTS
850.0	5189.	23.8	9.8	41.	181.5	6.0
800.0	6915.	19.4	8.1	48.	183.9	4.4
750.0	8725.	15.8	3.2	43.	8.2	5.7
700.0	10637.	12.6	-6	40.	32.2	14.2
650.0	12660.	8.0	-9.5	28.	22.8	13.5
600.0	14806.	2.7	-15.2	25.	33.9	16.2
550.0	17090.	-3.3	-14.4	42.	39.6	22.9
500.0	19541.	-8.3	-23.5	28.	52.9	21.3
450.0	22192.	-14.3	-34.8	16.	62.6	15.2
400.0	25094.	-18.8	-38.9	15.	83.9	11.3
350.0	28312.	-26.1	-35.6	40.	37.6	1.6
300.0	31909.	-34.5	-50.4	18.	41.6	9.6
250.0	36002.	-43.5			195.5	4.4
200.0	40820.	-53.4			253.4	16.1
175.0	43614.	-57.4			227.9	5.6
150.0	46771.	-62.9			192.8	15.8
125.0	50412.	-66.8			178.8	20.9
100.0	54786.	-72.3			227.1	5.5
80.0	59088.	-67.3			193.0	.9
70.0	61774.	-62.1			104.6	15.9
60.0	64907.	-61.3			83.7	15.4
50.0	68650.	-56.6			83.2	21.2
40.0	73308.	-55.3			99.9	24.0
30.0	79396.	-49.5			106.6	23.2
25.0	83327.	-47.4				

STATION ALTITUDE 3997.30 FEET MSL
 26 JUNE 79 0915 HRS MST
 ASCENSION NO. 208

MRN MANDATORY LEVELS
 1770060208
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GEODETIC COORDINATES
 32.48034 LAT DEG
 106.42307 LON DEG

GEOPOTENTIAL ALTITUDE DECAMETERS	DIRECTION DEG (TN)	WIND DATA SPEED MPS	N-S MPS	E-W MPS	DEW PT DEP DEG C	TEMPERATURE		PRESSURE MILLIBARS
						AIR DEG C		
2540.	9999.**	9999.**	-9999.**	-9999.**	99	-47.4		2.500+1
2420.	107.	12.	3.	-11.	99	-49.5		3.000+1
2234.	100.	12.	2.	-12.	99	-55.3		4.000+1
2092.	83.	11.	-1.	-11.	99	-56.6		5.000+1
1978.	84.	8.	-1.	-8.	99	-61.3		6.000+1
1883.	105.	8.	2.	-8.	99	-62.1		7.000+1
1801.	193.	0.	0.	0.	99	-67.3		8.000+1
1670.	227.	3.	2.	2.	99	-72.3		1.000+2
1537.	179.	11.	11.	-0.	99	-66.8		1.250+2
1426.	193.	8.	8.	2.	99	-62.9		1.500+2
1329.	228.	3.	2.	2.	99	-57.4		1.750+2
1244.	253.	8.	2.	8.	99	-53.4		2.000+2
1097.	195.	2.	2.	1.	99	-43.5		2.500+2
973.	42.	5.	-4.	-3.	16	-34.5		3.000+2
863.	38.	1.	-1.	-1.	09	-26.1		3.500+2
765.	84.	6.	-1.	-6.	20	-18.8		4.000+2
676.	63.	8.	-4.	-7.	20	-14.3		4.500+2
596.	53.	11.	-7.	-9.	15	-8.3		5.000+2
521.	40.	12.	-9.	-8.	11	-3.3		5.500+2
451.	34.	8.	-7.	-5.	18	2.7		6.000+2
386.	23.	7.	-6.	-3.	17	8.0		6.500+2
324.	32.	7.	-6.	-4.	13	12.6		7.000+2
260.	8.	3.	-3.	-0.	13	15.8		7.500+2
211.	184.	2.	2.	0.	11	19.4		8.000+2
156.	181.	3.	3.	0.	14	23.8		8.500+2

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